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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/934,906	08/22/2001	Joseph F. Kenney JR.	091395-9235 (4872-TC-AU)	8047

7590

11/08/2002

John C. Bigler
Michael Best & Friedrich LLP
Suite 360
3773 Corporate Parkway
Center Valley, PA 18034

EXAMINER

GRAHAM, MATTHEW C

ART UNIT

PAPER NUMBER

3683

DATE MAILED: 11/08/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No. 91/934,906

Applicant(s)

KENNEDY, JR.

SK

Examiner

GRAHAM

Art Unit

3683

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on _____.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-15 is/are pending in the application.
- 4a) Of the above, claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-9 AND 11-14 is/are rejected.
- 7) ☒ Claim(s) 10 & 15 is/are objected to.
- 8) ☐ Claims _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are objected to by the Examiner.
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119

- 13) ☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).
- a) ☐ All b) ☐ Some* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

*See the attached detailed Office action for a list of the certified copies not received.

- 14) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

Attachment(s)

- 15) ☒ Notice of References Cited (PTO-892)
- 16) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-848)
- 17) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s). _____
- 18) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 19) ☐ Notice of Informal Patent Application (PTO-152)
- 20) ☐ Other: _____

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1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-9 and 11-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Pitner '956 in view of the disclosed prior art shown in Figures 1 and 2.

Pitner shows an axial thrust bearing having a retainer 713 and spring 711. The claimed invention differs only in the type of spring.

The disclosed prior art shows the use of Belleville spring washers to retain thrust bearings.

It would have been obvious to one of ordinary skill in the art to have utilized a spring washer in Pitner in view of the disclosed prior art as a mere substitute of known equivalent springs.

Re-claim 2, Pitner shows a case.

Re-claim 3-5, the case of Pitner forms a two-piece cup.

Re-claim 6, the use of a one-piece cup is shown in Fig. 6 of Pitner.

Re-claim 7, to have the aperture at the bottom of the cup of Pitner would have been obvious to one of ordinary skill in the art as a mere reversal of location of parts.

Re-claims 8-9, the disclosed prior art shows Belleville springs.

Re-claim 11, Pitner shows rollers.

Re-claim 12, Pitner shows a box-type bearing cage.

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Re-claim 13, the use of a sigma-type cage would have been obvious to one of ordinary skill in the art as a mere substitute of known equivalent parts.

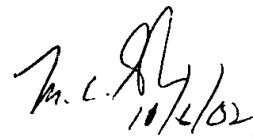
Re-claim 14, the type of manufacturing method would have been obvious to one of ordinary skill in the art as a well-known forming process that is not critical to the claimed product.

3. Claims 10 and 15 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

4. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Chiba and Tsuruki show thrust bearings.

5. Any inquiry concerning this communication should be directed to Mr. Graham at telephone number (703) 308-1113.

Graham/kl
October 17, 2002



MATTHEW C. GRAHAM
PRIMARY EXAMINER
GROUP 310